2: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

which lasted about three quarters of an hour; when they again took shelter within their walls. In the first engagement the enemy had forty men killed, and Finow only two: in the last attack they had only one man killed, and Finow none, though several died afterwards of their wounds; but this was only an engagement with arrows and spears, which they are very dexterous in avoiding: clubs were not used; for the enemy were upon a higher ground, and it would not have been prudent to have attacked them with the club, and risk the loss of their former advantages; and the enemy were too much discouraged to venture into the plain for this purpose. The day was so rainy that no muskets could be well used. In the last affair Mr. Mariner received an arrow in his foot, which passed quite through the broadest part of it: luckily it was not a bearded arrow; but the wound was, nevertheless, a very bad one; for the weapon being made of a short, splintering wood, it broke in, and consequently he was afterwards disabled for several months; for the Tonga surgeons have not the best instruments in the world, and the pieces of wood they took out from time to time, by no better means than cutting down upon them with sharp shells, or bamboo; which rendered the affair very tedious and painful.

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

thus schooled: nor would any one, as Mr. Mariner believes, undertake an important surgical operation, unless he feels himself confident in what he is about to perform; and it must be said of them, that they are not rash in their opinions. When a surgeon performs an operation, he never fails to obtain a present from the patient or his friends.

The three most important operations are *cawso*, or paracentesis thoracis; *tocolosi*, or an operation for the cure of tetanus, which consists in making a seton of the urethra; and *boca*, or castration.

Cawso is an operation which is performed to allow of the escape of extravasated blood, which may have lodged in the cavity of the thorax, in consequence of wounds, or for the extraction of a broken arrow. There are no other instances where they think of performing it. The instruments they use are a piece of bamboo and a splinter of shell; sometimes a probe made of the mid-rib of the cocoa-nut leaf. Mr. Mariner has seen a number of persons on whom the operation had been performed, and who were in perfect health; and two instances of the fact itself he was an eye-witness to. The one we are about to describe was performed upon a Fiji islander, who had received a barbed arrow in the right side, be-

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

render by such means the wound more favourable. The wound had been received the day before; and on pressing the finger upon its orifice the broken end of the arrow could not now be felt, except by the pain which such pressure gave the patient. In the first place, the operator marked with a piece of charcoal the situation and length of the intended incision, which was about two inches; the small wound made by the arrow being in the centre of it. The integuments were now drawn upwards, so that the black line lay upon and parallel with the superior rib; an assistant pressing his hand above, and another below the situation of the intended incision, with a view to keep the integuments firm and steady. The operator having now chosen a fit piece of bamboo, began his incision, and carried it down to the bone, the whole length of the mark, which was done with five or six motions of the hand, aided by considerable pressure: in this part of the operation a shell could not be used, on account of its liability to break. The integuments being now allowed to return to their natural situation, the incision was cautiously continued with a splinter of shell, midway between the two ribs, dividing the intercostal muscles to nearly the same extent as the external wound, to allow of the introduction

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

amputating a portion of the præputium, according to the Jewish rite. 304 752

The operation of the *ta tattow*, or puncturing the skin, and marking it with certain configurations, though it is not properly surgical, yet we mention it here, as it is very apt to produce enlargements of the inguinal and axillary glands. The instrument used for the purpose of this operation somewhat resembles a small tooth comb: they have several kinds, of different degrees of breadth, from six up to fifty or sixty teeth: they are made of the bone of the wing of the wild duck. Being dipped in a mixture of soot and water, the outline of the *tattów* is first marked off before the operator begins to puncture, which he afterwards does by striking in the points of the instrument with a small stick cut out of a green branch of the cocoa-nut tree: when the skin begins to bleed, which it quickly does, the operator occasionally washes off the blood with cold water, and repeatedly goes over the same places: as this is a very painful process, but a small portion of it is done at once, giving the patient (who may justly be so called) intervals of three or four days rest, so that it is frequently two months before it is completely finished. The parts tattowed are from within two inches of the knees up to about three inches above the umbilicus: there are certain patterns or forms of [171] 304 [413] [237]

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

Formerly the whole of the clubs used to be engraved, but now this ornamental work is confined to the handle: it is executed with a great deal of neatness. A shark's tooth used to be the instrument, but now they make a sort of graver out of a nail flattened, sharpened, and fixed in a handle. Instances of their neatness in this sort of workmanship may be seen in our museums, and in the engraved representations of other works.

Fy cava, shaving the beard. They have two modes of performing this operation, viz. with the two valves of a certain kind of shell, which they call *bi'bi*, and with pumice-stone: the latter is used by the party himself who requires the operation; the former by those whose profession it is to shave others. The edge of one valve being pressed horizontally against the chin or lip by the left hand, that portion of the beard which appears upon it is rubbed or filed off by the rough back of the other valve. This operation is generally performed once in about eight or ten days. The heads of infants are always kept closely shaved; but this is done with a shark's tooth by the mother.

Fe oomoo, the art of cooking. If refinement in cookery be one proof of the civilization of a people, the natives of the South Seas have

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

of which serves for paste; but the mucilaginous substance of the *mahoá* root is sometimes substituted for it: at the same time others are busy scraping off the soft bark of the *coca* tree and the *tooi-tooi* tree, either of which when wrung out, without water, yields a reddish brown juice, to be used as a die. The *cobéchi*, or stamp is formed of the dried leaves of the *páoongo* sewed together so as to be of a sufficient size, and afterwards embroidered, according to various devices, with the wiry fibre of the cocoa-nut husk*; they are generally about two feet long, and a foot and a half broad: they are tied on to the convex side of half cylinders of wood, usually about six or eight feet long, to admit two or three similar operations to go on at the same time. The stamp being thus fixed, with the embroidered side uppermost, a piece of the prepared bark† is laid on it, and smeared over with a folded piece of *gnatoo* dipped in one of the reddish brown liquids before mentioned, so that the whole surface of the prepared bark becomes stained, but particularly those parts raised by the design in the stamp: another piece of

* Making these *cobechis* is another employment of the women, and mostly women of rank.

† The edges of the beaten bark, which is generally hard, knotty, and ragged, are cut off straight.

3: Mariner F-5 (1806-1810) 1818
0U9 Tonga 0U9

287 shore, and the finishing operation of *toogi hea*
531 commences, or staining it in certain places with
[386] the juice of the *hea*, which constitutes a brilliant red varnish; this is done in straight lines along those places where the edges of the printed portions join each other, and serves to conceal the little irregularities there; also in sundry other places, in the form of round spots about an inch and a quarter in diameter: after this the *gnatoo* is exposed one night to the dew, and the next day being dried in the sun, it is packed up in bales to be used when required. When *gnatoo* is not printed or stained, it is called *tapa*.

287 They make also an inferior kind of *gnatoo* of
[764] the bark of young bread-fruit trees, which, however, is coarse, and seldom worn, but is chiefly used for various purposes at funerals.

[462] The whole of these operations are performed
[565] by women: the embroidering of the *cobechis*,
[413] or stamps, is always done by women of rank.
[391] In respect to mat and basket-making, they have mats of various kinds, made of strips of
285 leaves or bark selected, dried, and otherwise
[462] prepared; all of which, except one or two of a coarser kind, are fabricated by women. The following are the names and qualities of them.

[291] *Gnafi gnafi*, mats to wear, of a finer quality, made of the leaves of the *fa* or *paoongo*, that

3: Mariner F-5 (1806-1810) 1818
OU9 Tonga OU9

of the nut, and have rather the appearance of wicker-work: the latter are sometimes variously stained and ornamented with beads or shells worked in. The larger and coarser baskets are generally made by men, to hold axes and other tools in: also the baskets used to hold victuals, made of the leaves of the cocoa-nut tree, are generally made by men.

Bawlá, mats for thatching houses, are either made by men or women, but more frequently by the former.

Most of these mats, baskets, &c. are made by women of some rank as an amusing as well as profitable occupation, exchanging them afterwards for other things: (See p. 95 of this volume). Making of combs, the teeth of which consist of the mid-rib of the cocoa-nut leaf, is also an employment of women of rank. Making thread is an occupation of females of the lower order: it is performed by twisting the separate parts of the thread, in the act of rolling them with the palm of the hand along the thigh, and by a return of the hand, twisting them together the contrary way. The material of the thread is the prepared bark of the *olongá*. Needles are generally made by carpenters out of human thigh bones, which are procured from their enemies slain in battle: the only use they have for them is to make sails.

54: Cook G,T-5 (1777) 1967 OU9 Tonga OU9

SUNDAY 25*th*. In my walk to day I happened to step into a house where a Woman was dressing the eyes of a young child which was blind; the eyes were much inflamed and seemed to be covered with a thin film. The instruments she used were two slender wooden probes, with which she had probed round the eyes so as to make them bleed; she had almost finished the opperation when I went in so that I saw but little of it.[1] In the same house another women was shaving a Childs head with a Sherks tooth stuck into the end of a piece of stick, she first wet the hair before the razor with a rag diped in water; the opperation gave no sort of pain to the Child although the hair was taken off as close as any of our razors would have done it,[2] I tryed one and found it an excellent succedanuem. But the men shave the beard with two shells, one of which they place under a small part of the beard and with the other scrape that part off;[3] in this manner they will shave very close, the opperation is rather long but no ways painfull and there are men who seem to profess it, and it was as common for to see some of our men sit to be shaved by these shavers, as it was for the Chiefs to come aboard to be shaved by our Barbers.[4]

Finding we got little or nothing where we lay,[5] I resolved to change our station and wait Feenoughs return in some other place; accordingly in the fore noon of the 26th we got under sail and Mon. 26 stood to the Southward along the reef of the island, having 14 and 13 fathom water a sandy bottom. We however met with several detatched Shoals, some were descovered by breake[r]s, some by the Water upon them appearing discourlered and others by the lead. At half past two PM having past several of these shoals and seeing more

were said to be at Huahine; and he was to have another one, p. 196 below. '. . . the man gave such answers & drew the number of the masts upon the sand, as to stagger us & put some confidence in the report, the fellow was very ready to go in our boats to prove the truth of his tale.'—King.

[1] Mariner has an interesting paragraph on Tongan ophthalmia and eye-surgery, II, p. cii: ending, 'Mr Mariner neither saw nor heard of but one man who had lost his sight by disease'.

[2] 'an absolute falsity [it] will not take it off so [well] as scissors.'—Bligh AL, I, p. 260.

[3] 'this is a better [plan] and they cut their bea[rds] off pretty close.'—Bligh AL, I, p. 261.

[4] 'none of our Sailors could bear it & none more than once try['d how] they liked the meth[od].'—Bligh AL, I, p. 261. Cf. Ellis, I, p. 93, on Tongan feelings in the matter: 'This operation [with shells] however is rather painful and tedious, and observing how expeditious and clean we performed it, they were desirous of trying it also; and it so far exceeded their expectations that scarce a day passed without plenty of customers.'

[5] 'But we have purchased almost all their commodities; they having very few things to dispose of except their young Girls which seems to be almost the only trade at present, & indeed is very advantageous to the men, for they are paid a hatchet for every nights lodging, or a Shirt.—This seems the Common run of trade—but in some instances I have seen two hatchets & a shirt or sheet given for a Nights lodging with a fine young Girl.—The men receive what is agree'd for & leave them on Board, & come for them again the next morning, & if the girls get any thing more they take it away the moment they come.'—Bayly T, 28 May.

/60 cont./

304 were tattooed. (167)

167. Cf. G. Forster, loc, cit. IV. p. 326; J. Cook, Beschreibung...loc. cit. VI. pp. 279/280; W. Waldegrave, Extracts.../cited in English/. loc. cit. p. 194

304 531 Tattooing, which consisted of elaborate figures and patterns, each of which had a special name, covered the abdomen and thighs, that is, all parts of the body from the hips to the knees, (168)

168. Mariner says: "...from within two inches of the knees up to about three inches above the umbilicus" /cited in English/ (J. Martin, loc. cit. II. p. 266).

including the penis. Women were little tattooed, for the most part only on the inside of the hands (fingers and palms), on the arms and sometimes on the legs, (169)

169. First observed by Waldegrave (see above).

304 554 626 with dotlike and star-shaped patterns. Among the Tongans it was generally considered unmanly not to be tattooed. Non-tattooed men would have been ridiculed by other men and more especially by women. 463 Usually special experts carried out the process when the person 413 reached adulthood. They used comblike instruments (made from the 237 wing bones of wild ducks), dipped these in a mixture of soot (from 386 Aleurites moluccana [L.] Willd.) and water, and, with a small stick and in a rather time-consuming procedure, hammered the pattern into the skin. (170)

170. Compare J. Martin, loc. cit. II. pp. 256/266.

304 191 198 This ancient tattooing, which was perhaps a fashion taken over from Samoa--although practiced for centuries--, has today almost entirely disappeared. In various villages of the Archipelago a few old men are still living who have this kind of tattoos, but they are Samoans or Tongans who some time ago submitted to the process in Samoa where this art is practiced to a certain extent even today.